

METHOD AND SYSTEM FOR EXTENDED VOLUME IMAGING USING MRI WITH PARALLEL RECEPTION

Abstract of Disclosure

A method and apparatus for producing an image from an extended volume of interest within a subject using a Magnetic Resonance Imaging (MRI) system are provided. The method comprises translating the volume using a positioning device along an axis of the MRI system. A plurality of MR signals are detected from at least one radiofrequency (RF) coil array for a given field-of-view within the MRI system as the positioning device is translated. The plurality of MR signals are sent to a plurality of receivers wherein the receivers are each adapted to adjust their respective center frequencies at a rate commensurate with a rate of translation of the positioning device. A plurality of respective sub-images corresponding to the plurality MR signals for each of the plurality of receivers are combined to form a composite image of the volume of interest.